

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An apparatus for treating highly corrosive agents, comprising:

a tube bundle heat exchanger, structured to carry out a heat exchange between two fluids one of which is highly corrosive and flowing inside of ~~said~~ at least one tube bundle,

wherein said at least one tube bundle comprises at least one titanium or titanium alloy tube, coated with a layer of zirconium or zirconium alloy ~~[[;]]~~ bonded to the ~~wherein said at least one titanium or titanium alloy tube and said zirconium or zirconium alloy coating layer are bonded together~~ metallurgically or through welding.

2. (Previously presented) Apparatus according to claim 1, wherein said at least one titanium or titanium alloy tube is coated on the inside by said zirconium or zirconium alloy layer.

3. (Previously presented) Apparatus according to claim 1, wherein said at least one titanium or titanium alloy tube has a thickness between 1.0 and 10 mm, and in that said zirconium or zirconium alloy coating layer has a thickness between 0.3 and 2.0 mm.

4. (Previously presented) Apparatus according to claim 1, wherein said at least one titanium or titanium alloy tube is only partially coated with said zirconium or zirconium alloy layer.

5. (Previously presented) Apparatus according to claim 4, wherein said zirconium or zirconium alloy layer coats solely an end portion of said heat exchange tube.

6. (Previously presented) Apparatus according to claim 3, wherein said zirconium or zirconium alloy layer extends in said at least one titanium or titanium alloy tube starting from an entry end towards an opposite end thereof, for a portion between 5 and 30%.

7. (Cancelled)

8. (Previously presented) Apparatus according to claim 1, wherein said at least one titanium or titanium alloy tube and said zirconium or zirconium alloy coating layer are bonded together through hot-drawing.

9. (Previously presented) Apparatus according to claim 1, wherein said heat exchanger comprises respective upper and lower tube plates for supporting said tube bundle, said tube plates being made of titanium or titanium alloy, or being coated with a titanium or titanium alloy layer.

10. (Previously presented) Apparatus according to claim 9, wherein said upper and lower tube plates are made of carbon or stainless steel, coated on the outside with a layer of 3-15 mm of titanium or titanium alloy.

11. (Previously presented) An apparatus according to claim 1, which is a stripper for the decomposition of ammonium carbamate in an urea production plant.

12. (Previously presented) An apparatus according to claim 1, which is a condenser for the condensation of ammonia and carbon dioxide into ammonium carbamate in an urea production plant.